

REMARKS/ARGUMENTS

The Examiner is thanked for the thorough examination and search of the subject.

The Specification has been amended to clarify the claim to priority and to bring the status of parent cases up to date. In particular, the second paragraph after the title has been amended to now read:

"This Patent Application is a Continuation-in-Part of INT01-002CIPC, filed as US Patent Application serial number 10/877,092, filed on June 25, 2004, which is a Continuation-in-Part of INT01-002CIP, filed as US Patent Application serial number 10/309,429, filed on Dec. 4, 2002, now issued as US Patent 6,870,516, also incorporated by reference in its entirety, which is a Continuation-in-Part application of docket number INT01-002, filed as US Patent Application serial number 10/075,778, filed on Feb. 14, 2002, now issued as US Patent 6,741,221, which claimed priority to US Provisional Patent Applications serial number 60/317,808, filed on September 7, 2001, serial number 60/269,414, filed on Feb. 16, 2001, and serial number 60/268,822, filed on February 15, 2001 all of which are incorporated by reference in their entirety."

Claims 1-19 have not been amended. Claims 20-72 have been canceled.

The making FINAL of the Restriction requirement is noted. Non-elected Claims 20-72 are hereby canceled. A divisional application will be filed to Claims 20-72 once the elected Claims are allowed.

All Claims are believed to be in condition for Allowance, and that is so requested.

Reconsideration of Claims 1-4, 7, and 10-15 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,947,005 to Aisenbrey is requested based on the following remarks.

A terminal disclaimer has been filed in compliance with 37 CFR 1.321(c) along with the required fee to overcome the rejections based on a non-statutory, obvious-type, double patenting grounds. The conflicting patent (U.S. Patent 6,947,005 to Aisenbrey) is commonly owned with the present application.

Reconsideration of Claims 1-4, 7, and 10-15 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 6,947,005 to Aisenbrey is requested based on the above remarks.

Reconsideration of Claims 1-19, rejected under 35 USC 102(e) as being anticipated by US 2004/02229224 to Dean et al is requested based on the following remarks.

The Dean reference is directed to conductive thermoplastics materials and antennas made from these materials. However, Applicant does not believe that Dean anticipates Applicant's claimed invention for several reasons for the reasons described herein among others.

U. S. Patent Application (2004/02229224) to Dean is believed to have been used by the Examiner as prior art to the subject application under 35 USC 102(e). However, Applicant believes that U. S. Patent Application (2004/02229224) to Dean should be removed as a reference under 35 USC 102(e) due to a prior disclosure of the same subject matter by the Applicant in the present application. In particular, the present application, serial number 10/823,099, is filed as a Continuation-in-Part of a parent US Patent Application, serial number 10/075,778, filed on February 14, 2002, and now issued as US Patent 6,741,221 to Aisenbrey. The parent application discloses:

"The conductive loaded resin-based materials comprise micron conductive powders or fibers loaded in a structural resin. The micron conductive powders are formed of metals such as nickel, copper, silver or the like. The micron conductive fibers can be nickel plated carbon fiber, stainless steel fiber, copper fiber, silver fiber, or the like. The structural material is a material such as a polymer resin. Structural material can be, here given as examples and not as an exhaustive list, polymer resins produced by GE PLASTICS, Pittsfield, MA, a range of other plastics produced by GE PLASTICS, Pittsfield, MA, a range of

other plastics produced by other manufacturers, silicones produced by GE SILICONES, Waterford, NY, or other flexible resin-based rubber compounds produced by other manufacturers. The resin-based structural material loaded with micron conductive powders or fibers can be molded, using a method such as injection molding, overmolding, or extruded to the desired shape. The conductive loaded resin-based materials can be cut or milled as desired to form the desired shape of the antenna elements. The composition of the composite materials can affect the antenna characteristics and must be properly controlled. The composite could also be in the family of polyesters with woven or webbed micron stainless steel fibers or other micron conductive fibers forming a cloth like material which, when properly designed in metal content and shape, can be used to realize a very high performance cloth antenna. Such a cloth antenna could be embedded in a persons clothing as well as in insulating materials such as rubber or plastic. The woven or webbed conductive cloths could also be laminated to materials such as Teflon, FR-4, or any resin-based hard material.” (page 9 and 10)

In addition, the parent application further claims priority to a US Provisional Patent Application serial number 60/317,808, filed on September 7, 2001, which discloses:

“The essence of this invention is the use of conductive composites such as conductive fibers, powders, or concentrates and form shaping

techniques such as injection molding or extrusion with structural materials to create antennas that include planar as well as conformal antennas, dipoles, monopoles plus patch antennas.

These antennas can readily be cut, milled, injection molded extruded to any shape or size, resulting in a more efficient and less costly antenna than what is commonly known as an antenna today. In addition, the shaped conductive composite antenna can be designed to be an integral fixture of the housing of a display device, i.e., PDA, Laptop casing, cell or portable phone or any device needing an antenna.

The composite materials mentioned above include: All moldable or extrudable materials blended with nickel-plated carbon fiber, stainless steel fibers, copper and silver fibers or any other conductive fiber materials. Conductive filler powders and or concentrates may also be blended together in the end process. There are limits on the concentration (doping level) of conductor fibers, conductive powders, magnetic powders or conductive concentrates loaded with the structural materials. Limits are needed to assure performance as well as material integrity.” (page 1)

Based on the above, Applicant believes that the pertinent subject matter of antennas formed of conductive loaded resin-based material comprising conductive materials in a base resin is disclosed in the aforementioned parent application, now

issued as for US Patent 6,741,221, filed February 14, 2002, and in the aforementioned provisional application, serial number 60/317,808, filed on September 7, 2001. As a result, this subject matter was disclosed by the Applicant in the present application prior to the publication date of January 29, 2004, of U.S. Patent Application 2004/02229224 to Dean et al and prior to the filing date of February 1, 2003, of the provisional application 60/446,832 to which Dean claims priority. Therefore, Applicant believes that U.S. Patent Application 2004/02229224 to Dean et al should be removed as prior art under 35 USC 102(e). The rejection of Applicant's Claims 1-19 as anticipated by Dean et al should be considered moot in light of the elimination of Dean as prior art under 35 USC 102(e).

In addition, Applicant believes that features described in Dean and features of Applicant's claimed invention have been incorrectly equated and that, further, these features are substantially different as understood in the art. In particular, Applicant believes that the Examiner incorrectly equates (1) Dean's term "circuit board" and Applicant's term "chip carrier" and (2) Dean's term "various electronic components" and Applicant's term "integrated circuit die". The Examiner states, "Regarding claim 1, Dean discloses an integrated circuit device in fig. 3 comprising: a chip carrier 31 with an integrated circuit die 32 fixably attached to said chip carrier 31". Dean states the following with respect to Fig. 3,

"In Fig. 3, a portable electronic device (30) comprises a circuit board (31) to which are attached various electronic components (32)."

Based on the above, it appears that the Examiner equates (1) Dean's term "circuit board" to Applicant's term "chip carrier" and (2) Dean's term "various electronic components" to Applicant's term "integrated circuit." However, the equality of these terms does not appear justified for the following reasons:

First, Applicant believes that equating the above terms is not justified based on the typical understanding of these terms by those skilled in the art. In the art "circuit boards" typically comprise an insulating material with conductive lines or traces overlying or perhaps layering inside the insulating material. A plurality of components is attached to the circuit board. The resulting combination of components and conductive lines forms a circuit. While an integrated circuit "chip carrier" may also be formed, in part, of insulating material and conductive lines, a chip carrier does not itself wire together multiple components. Rather, a chip carrier simply provides a path for input and output signals from the integrated circuit be connected outside of the chip (for example, Specification, last paragraph page 2). These terms are substantially different and understood as such in the art. Applicant therefore believes that the Examiner has incorrectly equated the term "circuit board" with the term "chip carrier." As a result, the finding of anticipation in Dean, irrespective of Dean's applicability as prior art under 35 USC 102(e) should not be held based on this issue.

Second, in the art, the terms "integrated circuit" is known to mean a device where a plurality of interconnected components are formed onto a single material, typically a

semiconductor die. In the present invention, the use of the term "integrated circuit die" is understood to mean such as device. By comparison, Dean recites "various electronic components". With respect to one unique feature of an integrated circuit, namely its "integrated-ness", the teaching of Dean is nearly opposite in character. That is, where Applicant's claimed invention teaches an "*integrated* circuit", Dean teaches the attachment to the circuit board of "*various* electronic components." In the art of electronics, these are two very different approaches. These terms are substantially different and understood as such in the art. Applicant therefore believes that the Examiner has incorrectly equated the term "'various electronic components" with the term "integrated circuit." As a result, the finding of anticipation in Dean, irrespective of Dean's applicability as prior art under 35 USC 102(e) should not be held based on this issue.

Reconsideration of Claims 1-19, rejected under 35 USC 102(e) as being anticipated by US 2004/02229224 to Dean et al is requested based on the above remarks.

Applicants have reviewed the prior art made of record and not relied upon and have discussed their impact on the present invention above.

Allowance of all Claims is requested.

It is requested that should the Examiner not find that the Claims are now

Allowable that the Examiner call the undersigned at 989-894-4392 to overcome any problems preventing allowance.

Respectfully submitted,

A handwritten signature in black ink, reading "Douglas R. Schnabel". The signature is written in a cursive, flowing style.

Douglas R. Schnabel, Reg. No. 47,927